

Comparisons of Job Characteristics

Focus Occupation: [Electro-Mechanical Technicians \(17-3024\)](#)

Associated Occupation: [Electricians \(47-2111\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 67

Focus Occupation: Electro-Mechanical Technicians (17-3024)

Associated Occupation: Electricians (47-2111)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mechanical	6.8	16.5	15.6	0	Current knowledge level may be sufficient
Building and Construction	4.0	14.6	3.2	<<	Extensive education and/or training may be required
Mathematics	9.2	14.5	16.0	>	Current knowledge level is likely sufficient
Design	5.2	13.4	7.8	<<	Extensive education and/or training may be required
Administration and Management	8.4	12.2	4.6	<<	Extensive education and/or training may be required
Engineering and Technology	5.7	11.8	14.2	>	Current knowledge level is likely sufficient
Physics	4.3	10.9	6.6	<<	Extensive education and/or training may be required
Telecommunications	3.9	10.4	3.0	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Electro-Mechanical Technicians (17-3024)

Associated Occupation: Electricians (47-2111)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Troubleshooting	4.5	12.3	12.8	0	Current skill level may be sufficient
Repairing	3.4	11.6	12.3	0	Current skill level may be sufficient
Quality Control Analysis	5.9	11.0	12.9	>	Skill level is likely sufficient
Equipment Maintenance	3.5	10.3	10.8	0	Current skill level may be sufficient
Installation	1.7	9.4	10.2	0	Current skill level may be sufficient

Equipment Selection	3.3	8.4	9.2	0	Current skill level may be sufficient
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The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 81			
Focus Occupation: Electro-Mechanical Technicians (17-3024) Associated Occupation: Electricians (47-2111)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Visual Color Discrimination	6.4	12.8	10.6	<	Some improvement in abilities may be required
Visualization	7.5	12.2	10.8	<	Some improvement in abilities may be required
Finger Dexterity	7.6	11.8	12.5	0	Current ability level may be sufficient
Extent Flexibility	4.8	10.4	1.5	<<	Extensive improvement in abilities may be required
Gross Body Equilibrium	3.2	8.2	1.3	<<	Extensive improvement in abilities may be required
Speed of Limb Movement	3.2	6.6	4.8	<<	Extensive improvement in abilities may be required
Glare Sensitivity	2.6	5.9	5.0	<	Some improvement in abilities may be required
Sound Localization	2.2	5.3	1.5	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 76
Focus Occupation: Electro-Mechanical Technicians (17-3024) Associated Occupation: Electricians (47-2111)		
Work Activities	Exclusivity of Activity	
Fabricate, assemble, or disassemble manufactured products by hand	11	
Install/connect electrical equipment to power circuit	57	
Read blueprints	10	
Read technical drawings	7	
Repair or replace electrical wiring, circuits, fixtures, or equipment	49	
Solder electrical or electronic connections or components	55	
Understand service or repair manuals	40	
Use electrical or electronic test devices or equipment	40	
Use hand or power tools	2	
Use oscilloscopes in electronics repair	77	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 80

Focus Occupation: Electro-Mechanical Technicians (17-3024)
Associated Occupation: Electricians (47-2111)

Tools and Technologies	Exclusivity
Business function specific software	1
Computer printers	2
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Data management and query software	1
Electrical measuring and testing equipment	7
Finance accounting and enterprise resource planning ERP software	2
Forming tools	2
Holding and clamping tools	3
Indicating and recording instruments	2
Industry specific software	1
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Light and wave generating and measuring equipment	4
Machine tools	7
Measuring and layout tools	3
Power tools	2
Pressure measuring and control instruments	10
Prying and bending tools	10
Soldering and brazing and welding machinery and supplies	6
Temperature and heat measuring instruments	6
Viewing and observing instruments and accessories	4
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.